

UNITED STATES DEPARTMENT OF AGRICULTURE  
BUREAU OF AGRICULTURAL ECONOMICS

TRAINING GUIDE

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SURVEY OF  
FARM HOUSING AND OTHER FARM BUILDINGS

## CONTENTS

	<u>PAGE NUMBER</u>
I. Glossary of Terms . . . . .	1
II. The Housing Act . . . . .	4
III. Purpose of The Housing Survey . . . . .	6
IV. Selection of the Sample . . . . .	6
V. Work to Be Done in "A" Segments . . . . .	7
VI. The House Identification Sheet "A" and "B" Segments .	8
VII. The "A" Schedule . . . . .	9
VIII. Supplemental "A" Schedule . . . . .	12
IX. Work to Be Done in the "B" Segments . . . . .	12
X. The Construction Sheet . . . . .	13
XI. The "B" Schedule . . . . .	13
XII. Supplemental "B" Schedule . . . . .	13
XIII. Supplemental Population Sheet . . . . .	14
XIV. Time and Mileage Certificate . . . . .	14

## I. GLOSSARY OF TERMS

### Decking

Same as roof sheathing; solid or tight layer over the roof frame. Usually 1-inch boards but may be heavy plywood or gypsum board.

### Dormer window

A vertical window projecting from a sloping roof, providing light, ventilation, and additional headroom.

### Farm Defined

A farm, in this survey, is any place of 3 acres or more on which \$150 worth of agricultural products were produced in 1949 or will be produced in 1950.

### Foundation

Masonry wall, including the footing, or placed on it, and extending 8 to 24 inches above ground to form the basement wall and to support the frame or superstructure.

### Furring

Strips of wood applied to a surface to make an even base for other material, such as lath and plaster, and form an air space within the finished wall.

### Head of Household

The head of the house will usually be the husband, but list as head the person so regarded by the other members of the household.

### Hired manager

A hired manager operates a farm for others for wages or salary and makes most of the decisions regarding the operation of the farm. Persons acting as caretakers, or hired laborers are not considered managers. Persons who supervise work of others but have no responsibility for planning operations are not considered managers. A hired manager may be paid a salary, a part of either gross or net income, or a rate per acre. He may not have a written agreement but does have some agreement with the owner of the land.

### House

A house, when referred to in this survey, is a dwelling or structure either inhabited by humans or is intended for human habitation.

### Household

A household is the entire group of persons who live in one dwelling unit. It may be one person living alone or several people living together. It includes the household head and all of his relations living in the dwelling unit and also all lodgers, hired hands, and other persons not related to the head, who live there.

### Insulation

Any material incorporated into walls, ceilings, or roof especially to retard passage of heat.

Masonry wall

Brick, block, tile or stone walls extending all or part way to the roof line.

Partnership

A partnership is joint operation of a farm by two or more persons, each sharing (1) in the responsibilities of management and (2) in the income, losses, and liabilities. They may or may not have a written agreement. They may or may not be related. The senior partner is defined as the partner who is most active in the management of the farm. If this cannot be readily determined, consider the oldest member of the partnership as the senior partner.

Piers

Piers are short posts, usually of masonry, to support the house frame. Piers are commonly used for intermediate support in houses without basements and instead of continuous foundations in low cost construction.

Posts

Columns to support porch roofs or to carry the load on beams or girders under floors.

Remodeling

Remodeling is defined as changing the basic structure of the house, e.g., changing, moving or installing partitions.

Resident farm operator

A farm operator is considered as living on the farm he operates unless he lives inside the boundaries of an incorporated town or city; or in an unincorporated place having a population of 2,500 or more. If he lives in such town on a place of 3 acres or more he is to be interviewed.

Respondent

A respondent is the person who answers the questions you ask.

Segment sketch

Segment sketches are rapid, free-hand, enlarged drawings of the segments marked on the county maps. Their primary use is to provide a means for the interviewer to spot in the approximate location of each house in the segment.

Service buildings

A service building is a structure whose primary use is to store or protect livestock, crop products, or machinery.

Sheathing

An enclosing layer of boards or building sheets, approximately 1-inch thick applied on the outside of the wall frame.

Siding

The finish material applied to the outside wall. Usually placed over sheathing and paper, but nailed directly to framework in low-cost construction in mild-weather areas. May be wood, shingles, or manufactured sheets or panels.

Sills

Timbers set on top of foundation walls on which rest the exterior wall studs and first floor joists.

Studs

The uprights in either exterior walls or interior partitions to which sheathing boards and lath and plaster are applied.

Stucco

Exterior plaster applied to masonry walls or on metal mesh attached to the outside wall as a finish surface.

Subfloor

Underfloor, usually of 1-in ch boards laid diagonally on the floor frame, to serve as a base for the top or finish floor.

Veneer

A single layer of brick, stone or other masonry units, usually 4 to 5 inches thick, built up as a surface layer on outside walls. Veneer replaces siding and is attached to the wall by metal connections and is not in itself a supporting wall.

## II. THE HOUSING ACT

The Housing Act of 1949, signed by the President on July 15, 1949, was passed with the purpose of improving both nonfarm and farm housing. Title V of the Housing Act pertains to farm housing. The Act offers a means to attack some, but not all, of the obstacles to improved farm housing. The educational and technical services and research programs provided under the Act should benefit farmers in all income classes. Credit aids and grants are offered to a restricted group who need financial assistance. Provisions are made for the improvement of service buildings as well as housing.

Education and Technical Services: So much public interest has been centered on the financial aids established by the Act that the significance of the provisions of new technical services has been largely overlooked. The Extension Services of the Department of Agriculture and the Land-grant Colleges have done much to focus the interest of farmers on the improvement of housing and farm service buildings. The new Act strengthens the existing program and goes further by authorizing on-site direct guidance to individual farmers. Under the Act, the Secretary of Agriculture "is authorized to furnish, through such agencies as he may determine, to any person, including a person eligible for financial assistance under this title, without charge or at such charges as the Secretary may determine, technical services such as building plans, construction supervision and inspection, and advice and information regarding farm dwellings and other buildings."

Research: The Secretary is authorized to conduct research and technical studies with a view to reducing the cost of construction of adequate farm dwellings and other buildings.

The economic research on farm houses and farm service buildings, assigned to the Bureau of Agricultural Economics, may be divided into "Statistical Reporting" and "Basic Research on Farm Housing." The statistical reporting job is mainly one of getting an inventory of farm structures, including houses, then of keeping up-to-date on additions or losses to inventory. This work is indicated because the Act specifically requires "estimates of national farm housing needs and reports with respect to the progress being made toward meeting such needs." These reports must be prepared from information concerning the existing farm housing situation and new construction, additions, modernization, repairs, demolitions, and other changes in the inventory. The law requires research on methods of "reducing the cost of farm dwellings and buildings" including "new methods of distribution" of building materials.

Financial Aids: The financial assistance offered to farmers by the Act is of two types -- loans and grants. The loans are remedial in character -- they are designed either to encourage improvement in housing by those who have limited resources but at least a small equity in a reasonably adequate farm, or else to make a potentially adequate farm sufficiently profitable to support a good house. The grants are temporary expedients to aid families until something more fundamental can be done. The Farmers Home Administration of the Department of Agriculture will administer the program of loans and grants. It will also administer the provision of technical services to its own borrowers under the Housing Act.

Eligibility for Loans - Loans may be made only to owners of farms that (1) lack "decent, safe, and sanitary dwellings" for owner-occupants, resident farm labor, tenants, lessees, or sharecroppers. They may also be owners of farms that lack "other farm buildings adequate for the type of farming" in which the owner "engages or desires to engage." Moreover, (2) an applicant for a loan must show "that he is without sufficient resources to provide the necessary housing and buildings on his own account" and (3) "that he is unable to secure the credit necessary for such housing and buildings from other sources upon terms and conditions which he could reasonably be expected to fulfill."

Loans for houses and buildings on adequate farms - Numerous farmers, for example, young well-trained men just getting started, must sink their entire savings in equipment and a down-payment on farms. Although in the long run they may be able to pay off loans for improved housing, their equities are so small that they are not considered standard risks for conventional loans. Such loans may now be made by the Farmers Home Administration. Subject to the eligibility requirements given, a farm owner with sufficient income from farming or other sources to repay a loan for housing or service buildings in accordance with prescribed repayment plans may borrow the full cost of improvements for a term not to exceed 33 years at not more than 4 percent interest. The security may be whatever equity the borrower has in his farm, together with such additional security as the Secretary of Agriculture may require.

Loans for houses and buildings on potentially adequate farms - The law authorizes loans not only to farmers with adequate income and insufficient equity but also to those whose farms are expected to be so greatly improved within 5 years that their income from all sources will be adequate to carry the loan and to maintain a reasonable standard of living. This phase of the Act is best adapted to owner-operators who live on the farm. The applicant must agree to adopt a plan of farm improvement, enlargement, or adjusted practices which within 5 years would be expected to increase his income to an adequate level. The intent is to improve the earning capacity of the farm so that future help will be unnecessary. Funds would not be buried in uneconomic situations but an attempt would be made to remedy them. During the 5-year period within which the influence of the improvements is expected to materialize, if the borrower cannot meet his payments in full in any year the "Secretary of Agriculture" may entirely waive payments equivalent to not more than the interest due and 50 percent of the principal installments coming due.

Other special loans and grants for minor improvements - The loan provisions already described accommodate families with adequate income and those whose income can be made adequate. This leaves many families with inadequate housing but with farms incapable of sufficient improvement to bring the family income up to an adequate level. If any substantial expenditure were to be made on these houses, it would tend to crystallize an already uneconomic situation. Public and private interests require that whenever possible these families improve their earning outlook, either in nonfarm occupations or by moving to a farm with better potentialities. Full cooperation of educational, labor, commercial, and welfare agencies would seem to be required to handle such cases effectively.

The Housing Act of 1949 gives recognition to the housing aspect of this general problem by providing for minor improvements in such cases. Specifically mentioned in the Act as examples of what may be done are: "Improvements or additions, such as repairing roofs, providing toilet facilities, providing a convenient and sanitary water supply, supplying screens, repairing or providing structural supports, or making other similar repairs or improvements." Assistance is limited to owner-occupants. It may take the form either of loans or grants or a combination of the two. A loan or a combined loan and grant may not exceed \$1,000 and a grant or the grant-portion of a combination loan-grant may not exceed \$500.

### III. PURPOSE OF THE HOUSING SURVEY

The Housing Survey is in keeping with the Housing Act of 1949. The Act directs "the Secretary of Agriculture to prepare estimates of the national farm housing needs and to report with respect to the progress being made toward meeting such needs."

A memorandum from the Secretary of Agriculture gives the Bureau of Agricultural Economics the responsibility for economic research and for surveying the housing situation and need. This survey will provide an inventory of farm houses and a measure of the quality of farm housing. It will furnish the Extension Service with information on the number of farm houses that need remodeling or repairing and the number of farms needing new houses. It will give the Farmers Home Administration information on which to base its plans. The survey not only provides an inventory of existing houses, but it also begins what we hope will be an annual series of the volume of farm construction activity. It will cover the number of houses added to or removed from farms during 1949. It will give the dollar amount of construction on farms during 1949 distinguishing houses from service buildings and new construction from either remodeling or repairs.

The uses to which these data on the volume of construction activity are to be put are numerous. A few uses will be: (1) help in reporting on progress being made toward the improvement of farm houses and service buildings, (2) give improved weights for the parity price series, and (3) help the Forest Service to explain some of the disappearance of lumber.

### IV. SELECTION OF THE SAMPLE

#### A. Counties

1. Survey to be made in 382 counties, usually the same counties used for September 1948 survey.

At least one county in every State except Nevada, Rhode Island, and Connecticut.

2. Basis of selection of counties:

All counties in the United States were divided into 382 strata or groups of counties having similar types of farming. A county was then drawn from each group by a random process.

B. Segments

1. Within each county the total area was divided into small areas or segments. A selection of segments was then made by a random process. Thus every farm in the country had its proper chance of being in the sample and when all the sample farms are added together they will give a cross section or miniature of all farms in the country.

2. Segments are of two kinds:

"A" segments marked in red in county maps

"B" segments marked in green on map

There is an average of 4 or 5 "A" segments per county or about 1,700 for the United States.

There is an average of 6 "B" segments per county or a total of about 1,900 for the States having "B" segments.

3. Purpose of these two types of segments:

A. "A" segments; To provide adequate sample of the inventory of farm houses and of repairing done in 1949; and to get data on any new construction or remodeling that took place in 1949.

B. "B" segments; The number of farms in "A" segments reporting new construction or remodeling is not expected to be sufficient to provide adequate information on these items so additional segments, labelled "B" segments, were selected chiefly to build up the sample on new construction and remodeling.

V. WORK TO BE DONE IN "A" SEGMENTS

A. Identifying "A" Segments

County highway map, no aerial photo except in cases of urban areas. "A" segments colored in red and numbered A1, A2, etc., in order.

Segment boundaries are roads, streams, etc., whenever possible.

Segment sketches will be supplied except for city segments where photos are provided.

Draw in blank square to indicate approximate location of each house and assign it a number.

B. Go to each house and fill out H.I. Sheet - Form 1A.

C. Places for which questionnaires are to be completed:

1. In "A" segments complete an "A" schedule for every farm operator who lives inside an "A" segment on his farm.
  - a. If there are additional houses on his farm complete a supplemental "A" for each such house.
2. If not farm operator's residence no schedule will be completed except that if the house is on a farm of an operator who lives inside an "A" segment. A supplemental "A" schedule is to be completed when the operator is interviewed.

D. Places to be accounted for in segments:

1. All houses inside the boundaries of an "A" segment are to be accounted for.
2. Usually this means a visit to each house inside a segment but not necessarily a schedule to be completed.
3. Note that this is different from the farm headquarters approach used in previous surveys. It is recognized that no schedules will be obtained from non-resident farm operators but these will be excluded from the universe in expanding the data obtained by the survey. This survey is concerned only with the farms of 3 acres or over whose operators live on their farm.

VI. THE HOUSE IDENTIFICATION SHEET, "A" AND "B" SEGMENTS

House Identification Sheet

A. One H.I. Sheet to be used for each "A" and "B" segment.

B. Purpose:

1. Provide record of houses in the segment
2. Determine house for which schedules are to be completed
3. Determine proper schedule to use
4. Provide record of action taken

C. How it is used:

1. List house number
2. Ask questions as worded unless known from the introductory conversation.
3. Determine if schedule is necessary, if so, which kind of schedule is required.
4. Enter action taken
5. Enter totals at bottom of columns indicated

B. House connected with a sample farm but located outside segment - will need a supplemental schedule but will have no number and will not be recorded on the H.I. Sheet other than to be included in the total number of supplemental schedules obtained for a sample farm.

E. When it is necessary to use more than one H.I. Sheet for a segment, the schedule totals should be shown on the last sheet.

## VII. THE "A" SCHEDULE

The "A" schedule might be referred to as the "master" schedule as it contains all of the subject material included in the survey. The remaining schedules contain only a portion of the survey matter. An "A" schedule should be completed for each farm operator residing in a sample segment.

### A. Farm Acreage and Tenure

Questions A-1 thru A-3 are intended to show the total land owned and rented by the farm operator.

Questions A-5 and A-6 are to separate the land that the farm operator has rented out or under the supervision of a hired manager.

In A-7, we have the acreage that the farm operator actually operates. This will be the acreage referred to throughout the remainder of the schedule and should include only houses and buildings located on this acreage.

Question A-8 should be asked only if all of the following qualifications are met: (1) land is owned, (2) land is rented from others, and (3) land is either rented out to tenants or a hired manager operates some of the land.

### B. Construction of Farm Buildings in 1949

B-1. Include only farm service buildings that were completed in 1949.

Do not include any dwelling houses as they will be covered in another section of the schedule.

Each building completed in 1949 should be listed separately, except for bee hives, rabbit hutches, or other relatively small structures for which it would be difficult to separate labor, costs, and materials.

B-2. Include all farm service buildings that were added to or remodeled during 1949. Care should be exercised to exclude all repair work and to exclude any repair of buildings converted to use for dwellings.

In some instances it will be difficult to separate repair and remodeling information. Make a determined effort to obtain separate information from the farm operator.

B-3. Include only repairing or painting work done during 1949 to farm service buildings.

B-4. It is important to remember that this question is asked only if a "Yes" answer is received for B-1 or B-2.

C. Farm and Family Income

Products listed in answer to a, should be included in the total value shown for either c. or d.

If the operator rents any land from others, the total value of sales must be separated into the operators and landlords share.

Item f. should be asked only when the sum of items c, d, and e is less than \$1,000.

When interviewing a farm operator who is a landlord and has some of his land rented out, the income he receives from the land rented out should be shown in C-4.

For operators who recently moved to this farm, ask the income questions about the farm this operator was on in 1949.

D. Houses On This Farm

Houses reported should either be occupied or if vacant, should be in condition to be lived in again with a minimum of work. There is some chance of duplication if a house were being lived in but the operator did not consider it completed. For purposes of the survey, a house is completed when the doors, floors, and windows have been installed.

E. House Characteristics

Do not include a basement as such unless it has a finished floor.

Count windows and doors as having glass or screen even though the screen may be in bad shape and the window pane temporarily missing.

F. Population

Include all of the people living in the household the day of the enumeration.

The question pertaining to veteran status should be asked of all males over 16 years of age. He may be a veteran of either World War I or World War II. Women who were in the Service are not defined as veterans.

Question F-9 should be asked even though no children are shown as living in the household unless the age of the operator and his wife indicates there could be no children of college age.

#### G. Repairs, Remodeling, and New Construction of Houses

This may prove to be the most difficult section to complete when the enumerator encounters a farm having considerable repair, remodeling, or construction of houses during 1949.

The section might be clarified if the enumerator can think of houses falling into three categories:

- (1) started in 1950
- (2) under construction in 1949 whether completed or not, and
- (3) houses completed prior to 1949.

The schedule is arranged so that the above categories will enable the enumerator to skip to the correct questions.

- (1) Houses started in 1950 will not be included in the sample. Therefore, the schedule is complete when such a house is encountered.
- (2) Houses under construction in 1949 probably would have little or no painting, papering, repairing, or remodeling done in 1949. Therefore, questions G-2 and G-3 need not be asked and the enumerator may skip from G-1 to G-4 and continue with the remainder of the questions in Section G.
- (3) Information on labor and material costs and material used is being obtained only for houses under construction in 1949. If the house was completed prior to 1949, it will be necessary to get information on any repairing, painting, or remodeling work done in 1949 and the facilities in the house but no questions need be asked on labor or materials. Therefore, the enumerator need complete only questions G-1, G-2, G-3, and G-4; and may then skip to Section H.

#### H. Structural Character, Materials, and State of Repair

This section is to be completed on all houses except those started in 1950. The majority of the rating section may be completed by observation and it will not be necessary to question the respondent. The schedule has been designed so that, with few exceptions, only one check mark is required between the solid horizontal lines. The worst condition of each part of the construction is to be the deciding factor in rating any particular structural feature.

VIII. SUPPLEMENTAL "A" SCHEDULE

A supplemental "A" schedule will be taken on each additional house connected with a sample farm.

Additional house means all houses except the farm operator's house.

Houses and yards rented for cash are to be excluded and are not considered as being connected with the farm. Additional houses must be located on land operated by the farm operator but may be on land owned or rented.

Additional houses on an "A" schedule operator's farm which are located outside the segment require a Supplemental schedule but will not be assigned a number or a line on the H.I. Sheet and the words "Outside segment" will be written in the space provided for dwelling number.

Usually it will not be necessary to contact the occupant of the additional house as the farm operator will be able to supply the necessary information. Occasionally the farm operator may not be able to give the population information which will necessitate contacting the occupant of the house. In addition, the "H" Section will need to be completed for all additional houses which will require a trip to and inspection of the house exterior. For this reason, the action taken at a supplemental house is recorded as "H".

The "A" schedule obtains information about the entire farming operation and the farm operator's house. Therefore, the supplemental schedule is confined to information about the additional houses.

IX. WORK TO BE DONE IN "B" SEGMENTS

1. Make sure of segment boundaries
2. Go to (or account for) each house and fill out H.I. Sheet - Form 1B. If farm operator residence use "Construction" Sheet.
3. Complete a "B" schedule for every farm operator who lives inside a "B" segment on a farm and if in 1949 on his farm:
  - a. New buildings were put up
  - b. Building(s) were added to or remodeled
  - c. House(s) were added to or remodeled
  - d. New houses were under construction

If there are additional houses on his farm complete a supplemental "B" for each such house.

#### X. THE CONSTRUCTION SHEET

The construction sheet could easily be called a "screening" sheet. As a great many farms will report no remodeling or new construction during 1949, the construction sheet was devised to provide an expedient means of handling such farms.

There are four key questions that relate to remodeling and new construction of farm service buildings or houses. A "Yes" answer to any one of the four questions will require the use of the "B" schedule. Three other questions are included on the construction sheet for control purposes. As soon as a "Yes" answer is received to a key question, discontinue the construction sheet and turn to the "B" schedule, starting with the face sheet.

#### XI. THE "B" SCHEDULE

The "B" segments were added to the sample in order to expand the sample sufficiently to pick up an adequate number of farms with remodeling and new construction. As this is the primary use of the "B" segments, it follows that the "B" schedule will be limited to questions relating to remodeling and new construction and, of course, a few control questions to facilitate proper analysis.

Special instruction should be given on the "G" Section as it contains a number of important guide posts or skip instructions. If the interviewer becomes thoroughly familiar with the questions and the skip instructions, he should encounter no difficulty with this section.

None of the houses in the "B" segments will be rated.

#### XII. SUPPLEMENTAL "B" SCHEDULE

As in the "A" segments, the supplemental schedule will be used for each additional house connected with the sample farm.

In many instances, the farm operator's house will be the only house remodeled or constructed in 1949 so that it seems to be a waste of effort to go through one or more supplemental schedules. However, it could easily be the additional house that was remodeled with nothing being done to the farm operator's house. To retain comparability between the "A" and "B" segments, the supplemental "B" schedules are to be treated the same as the supplemental "A" schedules.

As the control questions are included in the "B" schedule, the Supplemental "B" schedule is confined to the "G" section relating to "Repairs, Remodeling, and New Construction of Houses."

In the "B" segments, the farm operator should be able to supply all of the information for both the "B" and Supplemental "B" schedules. Therefore, it will not be necessary to interview the occupant of the additional houses. The action taken at that house is recorded as N.R. (interview not required) but the interviewer should remember that information about that house must be obtained from the operator of the farm on which the additional house is located.

### XIII. SUPPLEMENTAL POPULATION SHEET

The supplemental population sheet has two purposes: (1) it may be used to report large household populations, (2) it will be used to report the population living in additional living quarters with separate cooking equipment ("Yes" answer to question E-3). The question wording is the same as that appearing in the schedule. However, questions F-7 thru F-9 have been omitted as they pertain to the farm operator's family.

When recording populations of over 7 persons, we advise splitting the columns in the schedule which will provide space for recording information on 14 people. For populations greater than 14, it will be necessary to use the supplemental population sheet.

### XIV. TIME AND MILEAGE CERTIFICATE

This form will not be new to many State supervisors. It should be noted that it has been revised and differs slightly from the form used in previous surveys.

Although it states on the reverse side that forms are to be submitted in duplicate by the interviewer, each State may establish a policy as to whether or not they desire them in duplicate. This form should be used by each State in preparing salary and mileage vouchers and to check on the performance of each interviewer. No copies are to be forwarded to Washington.